

rotation of buildings observed in the path of the storm, the transfer of heavy building timbers hundreds of feet, and the twisting off of trees are also tornado characteristics.

No one was injured, although a number had narrow escapes. The chief damage was confined to timber and crops. The corn and fruit crops within the path of the storm were almost entirely destroyed. Locust trees suffered more than any other kind. It has been estimated that half of the trees blown down were locusts. Oaks also suffered severely, a number of oaks destroyed had been landmarks for more than a century.

The following temperature and precipitation records for the date of the storm and the days immediately preceding and following were furnished by Dr. Harold L. Alden of the University of Virginia Observatory. The barometric pressure record was taken from the daily weather map published by the Washington office of the Weather Bureau. The record as reported by the Lynchburg office was used.

Date.	Temperature.		Atmospheric pressure.		Precipitation.	Remarks.
	Maximum.	Minimum.	Lynchburg—8 a. m.	Abnormal change in 12 hours.		
Sunday, Aug. 6.....	° F. 89	° F. 62	30.06	+4	0.61	Heavy hail, thunderstorm. Hail, thunderstorm.
Monday, Aug. 7.....	87	66	29.86	-14	0.79	
Tuesday, Aug. 8.....	87	64	29.76	-6	
Wednesday, Aug. 9...	77	59	29.96	+4	0.07	
Thursday, Aug. 10...	77	62	30.10	+8	

Tornadoes almost universally occur in the southeast quadrants of the cyclonic storms or cyclones, the type of storm that occurs in the United States and gives it nearly all of its precipitation. The weather map for Monday morning, August 7, shows such a storm occupying the region of the Great Lakes, the center of which, marked "low" was a long elliptical trough with axis extending east-northeast and west-southwest. The temperature distribution associated with this storm was rather peculiar, a belt of relatively low temperature occupying the Appalachian region from New York to Alabama.

The weather map for Tuesday shows that the storm had moved northeastward and its axis had shifted to a northeast-southwest direction to form a long linear trough paralleling the Atlantic Coast. Such long linear lows constitute the type of cyclone in which tornadoes frequently develop.

The immediate cause of the tornado was the passing eastward of the relatively cold belt of air that occupied the Appalachian region on Monday morning. This colder air came into conflict with the warm air moving northeastward on the Piedmont and produced a turbulence with vortex form that burrowed downward through the lower layers of air until it reached the surface of the earth as a typical tornado.

It is interesting to note in connection with the description of this tornado that a similar phenomenon occurred August 18, 1904. This tornado followed a path closely parallel to that pursued by the one of recent date. It had its origin in "Pigeon Top," an eastward sloping spur of the Blue Ridge west of Owensville and traveling rapidly eastward passed through Owensville. East of Owensville it turned to the southeast and reached the vicinity of Woods before its energy was dissipated. A funnel-shaped cloud followed by "white smoke" was observed by a number of persons. This tornado was accompanied by extremely heavy precipitation and intense lightning. Hail did a great amount of damage also.

At Owensville the path was one-half mile wide. A number of buildings were leveled and crops were destroyed. Fallen trees blocked the roads for days. Only one person was hurt. She was hit by a window sash that was blown into the room where she was sitting.

TORNADOES IN NEW MEXICO.

The rarity of tornadoes in New Mexico is justification for the printing of the accounts of two small tornadoes which occurred on June 2 and Aug. 4, respectively. The account is furnished by Mr. Chas. E. Linney, meteorologist in charge of the New Mexico Climatological Service.

The tornado of June 2, which occurred near Onava, is described by Mr. Ralph Hicks as being observed at 4 o'clock p. m. and lasting but a few moments. It moved to the southeast, the length of path being unknown. There was some rain, thunder, and lightning but no hail. The day was hot and sultry with the clouds moving very rapidly; a funnel cloud was observed. The damage amounted to about \$2,000 and was confined to fences, buildings, and live stock. No lives were lost.

The tornado of August 4 was observed at 2 p. m. at a point about 16 miles southwest of Dedman, Union County. Mr. Lewis Hall, who was caught by the storm, reports that it came from the northwest and moved to the southeast in a path about 3 miles long. It caused a loss close to \$5,000 in buildings, crops, fences, and live stock, while Mr. Hall and his wife were seriously hurt. The tornado was accompanied by rain, hail, thunder, and lightning, and a pendant funnel cloud was present.—A. J. H.